CLAIMS:

1. A system for transmitting data over a network to at least one client having a
    latency time to initiate transmission of said data to the client, including:

5   -   at least one anti-latency signal generator for generating at least one
                     anti-latency data stream containing at least a leading portion of data for
                     receipt by a client; and

            -.   at least one interactive signal generator for generating interactive data
                     stream containing at least a remaining portion of said data for the client

10   to merge into after receiving at least a portion of an anti-latency data
                     stream.

2. The system of Claim 1, wherein:

            -        said data is fragmented into K segments each requiring a time T to

15   transmit over the network;

            -        the anti-latency data streams includes M anti-latency data streams; and

            -        the interactive data streams includes N interactive data streams.

3. The system of Claim 1, wherein:

20   -   the anti-latency data streams contains the leading portion of said data
                     only;

            -        the interactive data streams contains a whole set of said data.

4. The system of Claim 2, wherein:

25   -   each of the M anti-latency data stream contains substantially identical
                     data repeated continuously within said anti-latency data stream, and
                     wherein each successive anti-latency data stream is staggered by an
                     anti-latency time interval; and

            -        each of the N interactive data stream repeated continuously within said

30   interactive data stream, and wherein each successive interactive data
                     stream is staggered by an interactive time interval.

5. The system of Claim 4, wherein:

            -        each of the M anti-latency data stream has J segments; and

- the anti-latency time interval $\geq T$.

6. The system of Claim 4, wherein the interactive time interval $\geq JT$.

5 7. The system of Claim 5, wherein $M \geq J$.

8. The system of Claim 7, wherein $M = J$.

9. The system of Claim 6, wherein $N \geq \dfrac{R}{JT}$.

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10. The system of Claim 9, wherein $N = \dfrac{R}{JT}$.

11. The system of Claim 8 or 10, wherein $M = N = J = \sqrt{\dfrac{R}{T}}$.

15 12. The system of Claim 4, wherein each of the N interactive data streams contains the whole set of said data having K segments.

13. The system of Claim 4, wherein each of the N interactive data streams contains the remaining portion of said data only.

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14. The system of Claim 4, wherein:
- the client is connected to any one of the M anti-latency data streams when the client raises a request for said data; and
- the client is connected to any one of the N interactive data streams.

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15. The system of Claim 2, wherein
- the anti-latency data streams includes:
  I. a leading data stream containing at least one leading segment of the leading portion of said data being repeated continuously within the
30   leading data stream; and

II. a plurality of finishing data streams, each of the finishing data streams:

- containing the rest of the leading portion of said data; and

- being repeated continuously within said finishing data stream, and wherein each successive finishing data stream is staggered by an anti-latency time interval;

- each of the N interactive data streams is repeated continuously within said interactive data stream, and wherein each successive interactive data stream is staggered by an interactive time interval.

16. The system of Claim 15, wherein

- each of the finishing data stream has J segments; and

- the anti-latency time interval $\geq T$.

17. The system of Claim 15, wherein the interactive time interval $\geq JT$.

18. The system of Claim 16, wherein $M \geq \dfrac{J}{2} + 1$.

19. The system of Claim 18, wherein $M = \dfrac{J}{2} + 1$.

20. The system of Claim 17, wherein $N \geq \dfrac{R}{JT}$.

21. The system of Claim 20, wherein $N = \dfrac{R}{JT}$.

22. The system of Claim 19 or 21, wherein $J = \sqrt{2K}$.

23. The system of Claim 15, wherein each of the N interactive data streams contains the whole set of said data having K segments.

24. The system of Claim 15, wherein each of the N interactive data streams contains the remaining portion of said data only.

25. The system of Claim 15, wherein:

5 - the client is connected to the leading data stream when the client raises a request for said data;

- the client is subsequently connected to any one of the finishing data streams; and

- the client is connected to any one of the N interactive data streams.

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26. The system of Claim 2, wherein:

- each of the N interactive data stream is repeated continuously within said interactive data stream, and wherein each successive interactive data stream is staggered by an interactive time interval $=\dfrac{KT}{N}$;

15 - the anti-latency data streams 1 to M are generated such that

  • an mth anti-latency data stream has F_m segments, wherein F_m is an mth Fibonacci number; and

  • the F_m segments are repeated continuously within the mth anti-latency data stream.

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27. The system of Claim 26, wherein:

- the client is connected to at least the mth and $(m+1)^{th}$ anti-latency data streams when the client raises a request for said data;

- the data in at least the mth and $(m+1)^{th}$ anti-latency data streams is buffered in the client;

25

- the client is subsequently connected to successive anti-latency data streams; and

until all data in the leading portion is received by the client.

30 28. The system of Claim 27, wherein:

- the client is connected to any one of the N interactive data streams after all data in the leading portion is received by the client.

29. The system of Claim 26, wherein each of the N interactive data streams contains the whole set of said data having K segments.

30. The system of Claim 26, wherein each of the N interactive data streams contains the remaining portion of said data only.

31. The system of Claim 26, wherein $F_M \geq \dfrac{2K}{N}$.

32. The system of Claim 26, wherein m starts from 1.

33. The system of Claim 26, wherein m starts from 4 and the repeating 1st, 2nd, and 3rd anti-latency data streams have the following configuration:

34. The system of Claim 2, wherein:
- each of the N interactive data steams is repeated continuously within said interactive data stream, and wherein each successive interactive data stream is staggered by an interactive time interval $= \dfrac{KT}{N}$;
- in the M anti-latency data streams,
  I. the leading portion of said data contains 1 to J leading data segments labeled; and
  II. the leading data segments are distributed in the M anti-latency data streams such that an jth leading segment is repeated by an anti-latency time interval $\leq jT$ within the anti-latency data streams.

35. The system of Claim 34, wherein:
- the client is connected to all of the M anti-latency data streams when the client raises a request for said data; and

- the leading portion of said data in the M anti-latency data streams is buffered in the client.

36. The system of Claim 35, wherein:

- the client is connected to any one of the N interactive data streams after all data in the leading portion is received by the client.

37. The system of Claim 34, wherein each of the N interactive data streams contains the whole set of said data having K segments.

38. The system of Claim 34, wherein each of the N interactive data streams contains the remaining portion of said data only.

39. The system of Claim 34, wherein $M \geq \sum_{j=1}^{j=J}(\frac{1}{j})$ and $J = \frac{K}{N}$.

40. The system of Claim 34 wherein six of the M anti-latency data streams containing the leading data segments are arranged as follows:

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	4	2	8	2	4	2	16	2	4	2	8	2	4	2	32	2	4	2	8	2	4	2	16	2	4	2	8	2	4	2	64	2	4
3	6	9	3	12	42	3	6	18	3	24	9	3	6		3	12	48	3	6	9	3	36	39	3	6	18	3	12	9	3	6		3
5	10	15	25		5	20			5	10	30		36	5	40	15		5	10	45	50		5	20	55	25	60	5	10	15	
7	14	21	11	13	17	19	7	28	22	23	26	27	11	7	14	29	13	31	33	34	7	17	21	11	19	37	31	7	14	13	22	33	23
38	41		43	44		46	47	49			51	52			53		54		56	57		58		59		61		62	63	

wherein those segments in blank contains any data.

41. The system of Claim 2, wherein the M anti-latency data streams

- contains the leading portion of said data; and
- further includes two batches of data streams being a 1st set of anti-latency data streams and a 2nd set of anti-latency data streams.

42. The system of Claim 41, wherein:

- the 1st anti-latency data streams have A 1st anti-latency data streams from 1 to A, wherein

  I. an ath anti-latency data stream has F_a segments, and F_a is an ath Fibonacci number; and

  II. the F_a segments are repeated continuously within the ath 1st anti-latency data stream

- the 2nd anti-latency data streams have B 2nd anti-latency data streams, wherein each of the B 2nd anti-latency data streams contains substantially identical data repeated continuously within said 2nd anti-latency data stream, and wherein each successive 2nd anti-latency data stream is staggered by a coarse-jump frame period;

such that the client can perform a coarse-jump function when the client is connected to the B 2nd anti-latency data stream.

43. The system of Claim 42, wherein:

- the client is connected to at least the ath and $(a+1)^{th}$ 1st anti-latency data streams when the client raises a request for said data;

- the data in at least the ath and $(a+1)^{th}$ 1st anti-latency data streams is buffered in the client;

- the client is subsequently connected to successive 1st anti-latency data streams;

until all data in the A 1st anti-latency data streams is received by the client.

44. The system of Claim 43, wherein:

- the client is connected to any one of the B 2nd anti-latency data streams after all data in the 1st anti-latency data streams is received by the client; and

- the client is connected to anyone of the N interactive data streams after all data in the connected B 2nd anti-latency data stream is received by the client.

45. The system of Claim 42, wherein each of the N interactive data streams contains the whole set of said data having K segments.

46.   The system of Claim 42, wherein each of the N interactive data streams contains the remaining portion of said data only.

5   47.   The system of Claim 42, wherein said coarse-jump frame period includes E data segments, and $F_A \geq 2E$.

48.   The system of Claim 42, wherein a starts from 1.

10   49.   The system of Claim 42, wherein a starts from 4 and the repeating 1st, 2nd, and 3rd anti-latency data streams have the following configuration:

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3
4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5

50.   The system of Claim 41, wherein:

15   -   the 1st anti-latency data streams have A 1st anti-latency data streams from 1 to A, wherein

   I.   an ath anti-latency data stream has F_a segments, wherein F_a is an ath Fibonacci number; and

   II.   the F_a segments are repeated continuously within the ath 1st anti-

20   latency data stream

   -   the 2nd anti-latency data streams have B 2nd anti-latency data stream including

   I.   a leading data stream containing at least one leading segment of the leading portion of said data being repeated continuously within the

25   leading data stream; and

   II.   a plurality of finishing data streams, each of the finishing data streams:

      •   containing the rest of the leading portion of said data; and

- being repeated continuously within said finishing data stream, and wherein each successive finishing data stream is staggered by a coarse-jump frame period

such that the client can perform a coarse-jump interactive function when the client is connected to the B 2nd anti-latency data streams.

51. The system of Claim 50, wherein:
   - the client is connected to at least the ath and $(a+1)^{th}$ 1st anti-latency data streams when the client raises a request for said data;
   - the data in at least the ath and $(a+1)^{th}$ 1st anti-latency data streams is buffered in the client;
   - the client is subsequently connected to successive 1st anti-latency data streams;

until all data in the A 1st anti-latency data streams is received by the client.

52. The system of Claim 51, wherein:
   - the client is connected to the leading data stream after all data in the 1st anti-latency data streams is received by the client;
   - the client is subsequently connected to any one of the finishing data streams; and
   - the client is connected to anyone of the N interactive data streams after all data in the B 2nd anti-latency data streams is received by the client.

53. The system of Claim 50, wherein each of the N interactive data streams contains the whole set of said data having K segments.

54. The system of Claim 50, wherein each of the N interactive data streams contains the remaining portion of said data only.

55. The system of Claim 50, wherein said coarse-jump frame period includes E data segments, and $F_A \geq 2E$.

56. The system of Claim 50, wherein a starts from 1.

57. The system of Claim 50, wherein a starts from 4 and the repeating 1st, 2nd, and 3rd data streams of the A 1st anti-latency data streams have the following configuration:

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3
4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5		

58. The system of Claim 41, wherein:

- the 1st anti-latency data streams have A 1st anti-latency data streams, wherein,

   I. the A 1st anti-latency data streams contains 1 to C 1st data segments; and

   II. the 1st data segments are distributed in the A 1st anti-latency data streams such that an cth leading segment is repeated by an anti-latency time interval $\leq cT$ within the A 1st anti-latency data streams;

- the 2nd anti-latency data streams have B 2nd anti-latency data streams, wherein each of the B 2nd anti-latency data streams contains substantially identical data repeated continuously within said 2nd anti-latency data stream, and wherein each successive 2nd anti-latency data stream is staggered by a coarse-jump frame period;

such that the client can perform a coarse-jump interactive function when the client is connected to the B 2nd anti-latency data stream.

59. The system of Claim 58, wherein:

- the client is connected to all of the A 1st anti-latency data streams when the client raises a request for said data; and

- data in the A 1st anti-latency data streams is buffered in the client until all data in the A 1st anti-latency data streams is received by the client.

60. The system of Claim 59, wherein:

- the client is connected to any one of the B 2nd anti-latency data streams after all data in the 1st anti-latency data streams is received by the client; and

- the client is connected to anyone of the N interactive data streams after all data in the connected B 2nd anti-latency data stream is received by the client.

61. The system of Claim 58, wherein each of the N interactive data streams contains the whole set of said data having K segments.

62. The system of Claim 58, wherein each of the N interactive data streams contains the remaining portion of said data only.

63. The system of Claim 58, wherein said coarse-jump frame period includes E data segments, and $A \geq \sum_{c=1}^{c=E}\left(\dfrac{1}{c}\right)$.

64. The system of Claim 58, wherein six of the A 1st anti-latency data streams are arranged as follows:

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	4	2	8	2	4	2	16	2	4	2	8	2	4	2	32	2	4	2	8	2	4	2	16	2	4	2	8	2	4	2	64	2	4
3	6	9	3	12	42	3	6	18	3	24	9	3	6		3	12	48	3	6	9	3	36	39	3	6	18	3	12	9	3	6		3
5	10	15	25		5	20			5	10	30		35	5	40	15			5	10	45	50		5	20	55	25	60	5	10	15	
7	14	21	11	13	17	19	7	28	22	23	26	27	11	7	14	29	13	31	33	34	7	17	21	11	19	37	31	7	14	13	22	33	23
38	41		43	44		46	47	49			51	52			53		54		56	57		58		59		61		62	63		

wherein those segments in blank contains any data.

65. The system of Claim 41, wherein
   - the 1st anti-latency data streams have A 1st anti-latency data streams, wherein,

I. the A 1st anti-latency data streams contains 1 to C 1st data segments; and

II. the data segments I are distributed in the A 1st anti-latency data streams such that an cth leading segment is repeated by an anti-latency time interval $\leq cT$ within the A 1st anti-latency data streams;

the 2nd anti-latency data streams have B 2nd anti-latency data stream including

I. a leading data stream containing at least one leading segment of the leading portion of said data being repeated continuously within the leading data stream; and

II. a plurality of finishing data streams, each of the finishing data streams:

- containing the rest of the leading portion of said data; and

- being repeated continuously within said finishing data stream, and wherein each successive finishing data stream is staggered by a coarse-jump frame period

such that the client can perform a coarse-jump interactive function when the client is connected to the B 2nd anti-latency data streams.

66. The system of Claim 65, wherein:

- the client is connected to all of the A 1st anti-latency data streams when the client raises a request for said data; and

- data in the A 1st anti-latency data streams is buffered in the client until all data in the A 1st anti-latency data streams is received by the client.

67. The system of Claim 66, wherein:

- the client is connected to the leading data stream of the B 2nd anti-latency data streams after all data in the 1st anti-latency data streams is received by the client;

- the client is subsequently connected to any one of the finishing data streams; and

the client is connected to anyone of the N interactive data streams after all data in the B 2nd anti-latency data stream connected in step F is received by the client.

5   68.   The system of Claim 65, wherein each of the N interactive data streams contains the whole set of said data having K segments.

69.   The system of Claim 65, wherein each of the N interactive data streams contains the remaining portion of said data only.

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70.   The system of Claim 65, wherein said coarse-jump frame period includes E data segments, and $A \geq \sum_{c=1}^{c=E} (\frac{1}{c})$.

71.   The system of Claim 67, wherein six of the A 1st anti-latency data streams are

15   arranged as follows:

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	4	2	8	2	4	2	16	2	4	2	8	2	4	2	32	2	4	2	8	2	4	2	16	2	4	2	8	2	4	2	64	2	4
3	6	9	3	12	42	3	6	18	3	24	9	3	6		3	12	48	3	6	9	3	36	39	3	6	18	3	12	9	3	6		3
5	10	15	25		5	20			5	10	30		35	5	40	15			5	10	45	50		5	20	55	25	60	5	10	15		
7	14	21	11	13	17	19	7	28	22	23	26	27	11	7	14	29	13	31	33	34	7	17	21	11	19	37	31	7	14	13	22	33	23
38	41		43	44		46	47	49			51	52			53		54		56	57		58		59		61		62	63				

wherein those segments in blank contains any data.

72.   The system of any one of Claims 2, 4, 15, 26, 34, 41, 42, 50, 58, or 65,

20   wherein each of the K data segments contains a head portion and a tail portion, and the head portion contain a portion of data of the tail portion of the immediate preceding segment to facilitate merging of the K data segments when received by the client.

73. The system of any one of Claims 2, 4, 15, 26, 34, 41, 42, 50, 58, or 65, wherein at least a portion of data in the leading portion is pre-fetched in the client.

5 74. A system for transmitting data over a network to at least one client including a signal generator for fragmenting said data into K data segments each requiring a time T to transmit over the network, wherein each of the K data segments contains a head portion and a tail portion, and the head portion contains a portion of data of the tail portion of the immediate preceding segment to
10 facilitate merging of the K data segments when received by the client.

75. A system for transmitting data over a network to at least one client having a latency time to initiate transmission of said data to the client, including:
- at least one anti-latency signal generator for generating at least one of
15 anti-latency data stream containing at least a leading portion of data for receipt by the client;
- a buffer in the client for pre-fetching the leading portion in the client as pre-fetched data; and
- at least one interactive signal generator for generating at least one
20 interactive data stream containing at least a remaining portion of said data for the client to merge into the leading portion.

76. The system of Claim 75, wherein the pre-fetched data is refreshed during a refresh time period.
25
77. The system of Claim 76, wherein the refresh time period is an off-peak period.

78. The method of Claim 76, wherein pre-fetched data is refreshed once per day.

30 79. A system for transmitting data over a network to at least one client including at least one anti-latency signal generator for generating a plurality of anti-latency data streams, the anti-latency data streams include:

    -    a leading data stream containing at least one leading segment of a leading portion of said data being repeated continuously within the leading data stream; and

    -    a plurality of finishing data streams, each of the finishing data streams:

        •   containing at least the rest of the leading portion of said data; and

        •   repeated continuously within said finishing data stream, and wherein each successive finishing data stream is staggered by an anti-latency time interval.

80.   The system of Claim 79, wherein:

    -    the client is connected to the leading data stream when the client raises a request for said data; and

    -    the client is subsequently connected to any one of the finishing data streams.

81.   The system of Claim 79, wherein said data is fragmented into K segments each requiring a time T to transmit over the network, and the anti-latency time interval $\geq T$.

82.   A system for transmitting data over a network to at least one client including at least one anti-latency signal generator for generating a plurality of anti-latency data streams, wherein the anti-latency data streams include:

    -    M anti-latency data streams from 1 to M, wherein an mth anti-latency data stream has F_m segments, and F_m is an mth Fibonacci number; and wherein said F_m segments are repeated continuously within the mth anti-latency data stream.

83.   The system of Claim 82, wherein:

    -    the client is connected to at least the mth and $(m+1)^{th}$ anti-latency data streams when the client raises a request for said data;

    -    the data in at least the mth and $(m+1)^{th}$ anti-latency data streams is buffered in the client;

- the client is subsequently connected to successive anti-latency data streams; and

until all data is received by the client.

5   84.   The system of Claim 82, wherein m starts from 1.

85.   The system of Claim 82, wherein m starts from 4 and the repeating 1st, 2nd, and 3rd anti-latency data streams have the following configuration:

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3	2	3		
4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5	6	7	4	5		

10

86.   A system for transmitting data over a network to at least one client, said data being fragmented into K segments each requiring a time T to transmit over the network, including at least one anti-latency signal generator for generating a plurality of anti-latency data streams, wherein the anti-latency data streams

15   include:

- M anti-latency data streams containing 1 to K anti-latency data segments, wherein the anti-latency data segments are distributed in the M anti-latency data streams such that an kth leading segment is repeated by an anti-latency time interval $\leq kT$ within the anti-latency data

20   streams.

87.   The system of Claim 86, wherein:
- the client is connected to all of the M anti-latency data streams; and
- said data in the M anti-latency data streams is buffered in the client

25   when the client raises a request for said data.

88.   The system of Claim 86, wherein six of the M anti-latency data streams containing the leading data segments are arranged as follows:

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	4	2	8	2	4	2	16	2	4	2	8	2	4	2	32	2	4	2	8	2	4	2	16	2	4	2	8	2	4	2	64	2	4
3	6	9	3	12	42	3	6	18	3	24	9	3	6		3	12	48	3	6	9	3	36	39	3	6	18	3	12	9	3	6		9
5	10	15	25		5	20			5	10	30		35	5	40	15			5	10	45	50		5	20	55	25	60	5	10	15		
7	14	21	11	13	17	19	7	28	22	23	26	27	11	7	14	29	13	31	33	34	7	17	21	11	19	37	31	7	14	13	22	38	23
38	41		43	44		46	47	49			51	52			53		54		56	57		58		59		61		62	63				

wherein those segments in blank contains any data.

89. A receiver for receiving data being transmitted over a network to at least one client according to Claim 2, including:
- a processor for raising a request for said data; and
- at least one connector for connecting the client to the M anti-latency data streams and receiving data in the M anti-latency data streams.

90. The receiver of Claim 89, wherein:
- the connector is connected to the N interactive data streams after all data in the M anti-latency data streams is received by the receiver.

91. The receiver of Claim 89, wherein data in the leading portion is received sequentially.

92. The receiver of Claim 89, wherein the receiver connects to at least two of the anti-latency data streams simultaneously.

93. The receiver of Claim 92 further including:
- a buffer for buffering data in the two anti-latency data streams connected to the client that is received by the client sequentially.

94. The receiver of Claim 93, wherein the buffer includes random access memory and computer hard disk.

95. The receiver of Claim 93, wherein the buffer consists of random access memory.

96. The receiver of Claim 89, wherein the receiver connects to all of the anti-
5   latency data streams simultaneously.

97. The receiver of Claim 96 further including:
    - a buffer for buffering data in the anti-latency data streams connected in the client; and
10   wherein the processor rearranges the buffered data according to a proper sequence.

98. The receiver of Claim 97, wherein the buffer includes random access memory and computer hard disk.

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99. The receiver of Claim 97, wherein the buffer consists of random access memory.

100. The receiver of Claim 89, wherein at least a portion of data in the M anti-
20   latency data streams is pre-fetched in the client as pre-fetched data.

101. The receiver of Claim 100, wherein the pre-fetched data is refreshed during a refresh time period.

25 102. The receiver of Claim 101, wherein the refresh time period is 01:00-06:00.

103. The receiver of Claim 101, wherein the refresh time period is 10:00-15:00.

104. A receiver for receiving data being transmitted over a network to at least one
30   client, wherein said data includes a leading portion and a remaining portion, and the remaining portion is transmitted by at least one interactive data stream, including:
    - a buffer for pre-fetching the leading portion in the client as pre-fetched data; and
35   - a processor for merging the pre-fetched data to the remaining portion.

105. The receiver of Claim 104, wherein the pre-fetched data is refreshed during a refresh time period.

106. The receiver of Claim 105, wherein the refresh time period is an off-peak period.

107. The receiver of Claim 105, wherein pre-fetched data is refreshed once per day.